

# Intrapreneurship: A conceptual model and its dimensions

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**Abstract**— The present paper objective is to develop a conceptual model of intrapreneurship, or as it is also known, corporate entrepreneurship (CE). The intrapreneurship, through the encouragement of innovation in big companies, can represent both a competitive advantage and also the survival of a company nowadays. For being a current theme, intrapreneurship had its aspects explored more by the authors in recent years, however there are no conceptual standards designed and disseminated that can help to have a general view of the subject.

Based on the assumption that intrapreneurship can be grounded on pillars of various themes, the main and more important dimensions found in the literature were gathered. These dimensions, such as innovation capacity, risk taking, resources, among others, are considered essential for corporate entrepreneurship.

This paper proposes to discuss each one of the nine points raised and integrate them into one model. By the development of the subject, it was possible to obtain a well-grounded model with the key practice points of the intrapreneurship in large corporations. The nine dimensions were clustered in three core pillars (Structure, Management and Agents) in an intersection model, representing the interdependence between them.

**Keywords**— Intrapreneurship; conceptual model; dimensions; innovation.

## I. INTRODUCTION

“Intrapreneurship” is a shortened term for “intra-corporate entrepreneurship” [1]. It is a “growing topic for both management and entrepreneurship research” [2]. The intrapreneurship brings competitive advantage to companies through innovation and development encouragement. This advantage is extremely important in ever-changing fierce markets where success can be determined by being more efficient and faster than the competitors, adapting and making changes to meet customers’ desires. [3]

The intrapreneurship is important to encourage the growth, profitability, rejuvenation and renewal, as well as ensuring survival in competitive markets. [4][5] The financial performance of the company can improve through intrapreneurship, because among its several positive characteristics, there are the new and sustainable thinking related to value creation, the search for a more efficient use of the resources and the adoption of a better motivational environment for the employees. [6]

Kuratko and Hodgetts [7] relate the entrepreneur actions inside companies with the facilitation of ideation process and the barriers minimization usually imposed by rigid corporate structures. Mohanty [8] stated that companies that seek to break paradigms invest and nurture the intrapreneurship within their structure so they can actually execute their innovation process leading to innovation in products, services and process, and consequently to better results. In a more individual aspect, the intrapreneurship brings to the company innumerable opportunities, tracing new paths, initiating new ventures, challenging the status quo, and thus gaining new land. [9]

Knowing all the important intrapreneurship dimensions facilitate innovative activities implementation in big companies through the possibility of effectiveness evaluation of the reference points.

## II. LITERATURE REVIEW

The literature can bring a lot of best practices references and general characteristics that a company should have in order to practice innovative actions

efficiently. From the reading and analysis of these authors, it was listed the main intrapreneurship dimensions with the aim of comprehend the innovation adoption in big corporates and their activities effectiveness.

### 2.1 Innovation and Renewal Ability

Innovation is an essential part of the theme. Innovation combined with strategic management is what elevates enterprises from small business. [10] For Drucker [11], innovation is the instrument by which an opportunity can become a new business or service, and in spite of the risks related to new ventures, if aligned with a good management and work methodology, these risks can be minimized. The search for new solutions to the customers' problems can demonstrate the company's innovation capacity. [12][13] It can bring different results, after all, intrapreneurship refers not only to business creation from inside projects, but also to the development of new products, services, technologies, process, strategies, marketing solutions and competitive posture. [14]

The ability to innovate is related to the tendency and frequency of engagement, the support and leadership of new ideas, and also with experimentation and creative process that can lead to new products, process or services.

[15][16] For this added value, both in intra and entrepreneurship, there is the need to capture ideas and resources. [17] The company can pursue new business and markets by redefining its products and services, what is essential to its survival. [14]

Encouraging new ideas is one of the primary characteristics of intrapreneur organizations. The opposite of what happens when the company only cares with quick return on investments and high-volume sales in the current period. They should be also worried about keeping the continuous generation of ideas. [18]

The renewal reflects the transformation of the organization by the flexibilization of key-ideas in which it is built. [14] It is necessary not only the creation of new products and the reach of new markets, but also the constantly renew of the business through adaptation and flexibility [19]. For that reason, some companies have been using the intrapreneurship as a strategic tool for growth and renewal. [20][21]

### 2.2 Risk-taking and management

Bosma, Stam and Wennekers [22], used the studies conducted in eleven countries with GEM (Global Entrepreneurship Monitor) data from various types of companies to confirm that less than 5% of the employees are considered intrapreneurs. Among the reasons, there is some apprehension of the risks that can cause status loss

(mentioned in high-income countries) and the job loss (mentioned in low-income countries). However, the risks must be considered as inherent feature to the innovation, new business formation, and aggressive or proactive actions inside the company. [14] This big companies' behavior focused in innovation is considered risky for their big investment and commitment with uncertain projects, which even with the failure possibility, can expect a great return with success. That scenario makes the risk-taking a distinctive dimension. [15]

Regarding the differences between intra and entrepreneurship risks, the main factor of divergence is that the entrepreneurs' own financial resources are very present in the second one. [23] Within the company, the employee can feel much safer to make risky decisions. By contrast, the financial rewards can be infinitely greater to entrepreneurs. [24]

### 2.3 Corporate venturing

When the company is involved in the creation of a smaller one in order to take advantage of a market demand, this small organization is called venture or corporate venturing. [20][25] Some authors classify the instigation of renewal and innovation inside a company as "venture" too. [26]

A venture can be intern or extern. It is intern when remains part of the mother-organization structure. The extern venture has its own independent structure, even when it is known as a result of a bigger company.

This dimension is specially associated to intrapreneurship since ventures are fruits of corporative projects of existing enterprises, by definition. [27] The creation of a venture enhances performance by being a phenomenon that can change the company's structural organization. [2][14] Bulgelman says that, in the case of internal corporate venturing, the strategic engine lies in each intrapreneur's initiatives in their operational acts. [28]

### 2.4 Organizational Culture and Environment

One of the more important elements of success in both intra and entrepreneurship is the suitable environment. [29] The typical model of an organizational culture has a system of privileging conservative decisions, and this restrictive environment can inhibit creativity, flexibility, independence and risk taking. [18] The market environment and the appropriate internal factors are both essentials for the innovation ability of the company. [30] Menzel, Aaltio and Ulijn mention the importance of a motivating physical environment that encourages creativity and the constant exchange of ideas with, for example, the

abolition of closed departments, the use of joint tables, clear environments, etc. [21]

Products and services are not born spontaneously, but are results of a series of trials and errors. "Experimentation should be encouraged" says Hisrich [18], it is necessary to establish an environment that accepts errors and failures especially in the early stages of a project. Besides being a key organizational change, it can also reduce costs, since it is common that errors in more advanced stages of a project can lead to serious consequences. It must be rooted in the company's culture that the learning in the failure is also important. The success cannot be measured only by financial performance, but also with the knowledge gained with the failure. [31] The failure can develop important skills in the intrapreneurs. With the errors, the team can engage, seek more meaningful information and internal opportunities as training, funding and mentoring. [24]

The recognition and the reward of the involved ones in the innovation projects should be remembered within the company. For new business, it is important to have in mind that the performance measures should be different from those taken on the daily basis. This is possible by adopting performance goals more generic and open, and rewarding the intrapreneurs by project stages than by final outcome. [18] Block and Ornati defend that the biggest motivation and reward that can be received is a high position or a percentage of the new established business. [32]

The reception of the changes that the organization goes through when practices the intrapreneurship is something that has to be managed. Rank, Pace and Frese suggest that psychologists can help to support the innovation and change climate by predicting and managing its effects. In fact, there are departments in the big companies that specifically take care of high impact projects that can cause major organization innovations. [33] Drejer defines these innovations as important changes that happen in the company's structure. To innovate, the company itself must be open to change. [34]

## 2.5 Proactivity

More than an essential skill of the intrapreneur, proactivity is an important characteristic for the company that wants to innovate. The tendency to lead instead of only follow the competitors, considered as pioneering, and actively compete against your rivals are some of aspects of intrapreneur companies. [16][35] Different than only react to the market, the innovative company always tries to anticipate itself by pursuing new opportunities in emergent markets and proactively bringing innovations. [15][13][36]

This posture is reflection of the actions taken by the top management and its strategic orientations for the company.

[14] As in entrepreneurship, pioneering brings great advantages for those who explore market opportunities. [37] There are authors that clarify that an organization can be proactive without necessarily be the first to take advantage of an opportunity [38], however, generally the authors connect proactivity to the causes of a company being innovative. [12][39]

Lumpkin and Dess affirm that proactivity refers to market opportunity. It is how the companies can take advantage creating an environment or suitable initiative to meet demand. [15]

## 2.6 Competitive aggressiveness

The willingness to overthrow and dominate competitors is seen as competitive aggressiveness. [40] Many people can confuse competitive aggressiveness with proactivity, since they both are dimensions that refer to corporate behavior. However, as previously mentioned, proactivity is related to the company's pioneering role in seizing market opportunities, while the competitive aggressiveness refers to the organization's challenging posture towards its competitors.

Differently from proactivity also, the company with competitive aggressiveness is concerned with responsiveness. While proactivity seeks to respond to opportunities, competitive aggressiveness seeks to respond to threats. [15]

This dimension is a characteristic very strong in entrepreneurship and in the ventures, since the risks are much greater for them than for established business, which makes aggressive attitudes critical to the survival and success of new entrants. [41]

## 2.7 Structure and Process for Autonomy

The organization worried about bringing an intrapreneur mindset should also be concerned with providing a structure that does not inhibit creativity and innovative actions in problem solving, from avoiding bureaucracies and hierarchies to pursuing an efficient innovation process. An organizational structure that supports intrapreneurship emerges slowly but it is extremely important for the company, although it is always considered a secondary activity. [18]

In order to promote intrapreneurship, many companies seek changes in organizational structure as the hierarchies' reduction and better work division by the delegation of responsibilities. [42] Entrepreneurship and intrapreneurship share many characteristics, but one of the main differences is their structures. Limitations by the hierarchy and a corporate context may require a lot of individual initiatives from the intrapreneurs. [22] Layers of bureaucracies and

traditions rarely contribute to innovation in big companies as well. [43] The ideal setting for intrapreneurship would be a flat structure that could reduce hierarchy and bureaucracy by giving employees autonomy for decision-making

An efficient communication channel is another one of the mentioned points by many authors such as van Everdingen & Waards [44]; Rejeb, Guimarães, Bolv & Assiélu; [45] Cooper; [46] Baruah & Ward; [24] Hisrich; [18] as essential in the culture and structure of the company concerned with innovation. From operational aspects as the information free transfer, to motivational strategic communication to employees and the update of the company's intrapreneurs' activities, these are topics that can make difference in how people can perceive the innovation in the company.

Creating a suitable structure to give autonomy to the intrapreneur is just one of the stages of the corporate entrepreneurship management. Its process of innovation, identification and opportunity-taking must remain constant and easy. Ireland, Hitt & Sirmon have identified that small enterprises can usually identify opportunities with more effectiveness although building competitive advantage is more difficult; while for large established companies it is easier to exploit chances for market advantage although they are less able to identify opportunities. [47]

In the most practical way, it is possible to implement procedures for the intrapreneur environment to work. Carvalho lists a framework of procedures that can facilitate the presence of innovation in the company. It is important to ensure that the intrapreneur finds a process that doesn't hamper innovation, since all projects have deadlines, costs, stakeholders that must be notified. Many of the aspects mentioned here dealt with important point to be achieved. A facilitating process is the bridge that will link the ideation to the final result because despite of defend an organization that don't introduce barriers, the company should have the minimum organization to reach the desired goals. [48]

At the end of each process stage, an evaluation system should be established to analyze the possibility of progress to the next phases or not. Always remembering that in order to maintain an intrapreneur organization in a healthy way, it is essential that there will be permission for the projects and ventures to fail as well as for the efficient ones to expand. [18]

## 2.8 Resources

Among many of the faced problems by companies interested in being intrapreneurs, there is the lack of money and the prioritization of other expenses. [29]

Intrapreneurship requires money. It is not uncommon for funds to be allocated for the resolution of recurring or immediate problems. [18] In addition, when there are resources available, they are difficult for the employee to achieve. The requirements list is so extensive that frustration overcomes the possible satisfaction of obtaining resources and discourages the intrapreneur. And depending on the purpose of the release of resources, it is necessary that the top management is aware that the investment returns only after a certain period of time.

In the entrepreneurship, to get resources becomes more difficult. In the majority of the cases, this resource presents itself as a personal investment of the entrepreneur. Unlike the intrapreneur, who usually don't participate in raising funds personally for corporate projects. [24]

However, after obtaining what is necessary for projects, the entrepreneur has more independency, while the intrapreneur often has no authority to decide the expenses alone. [12] When it is required to report regularly on its expenses and decisions, it can become a merely operational service and diverge from the kind of work an intrapreneur should seek. [49]

## 2.9 Multidisciplinary team and personal competences

The formation of a multidisciplinary team must be encouraged since new projects require inputs of several areas, so the people involved should be called in a planned way. [50] The presence of people with different roles and knowledge in a team relates to the idea of a flatter organization besides facilitating the exchange of information and abilities. [51] The intrapreneur activity is embedded in a network of contacts [52][53], as well as the intrapreneur, therefore it is important to unite creative and adaptive people. [54]

Other point that should receive attention was brought by Hisrich comparing entrepreneurship and intrapreneurship: accumulation of functions and stakeholders. In many companies, the intrapreneurs will come from other internal areas, performing the job with innovation as a parallel project to their daily activities of their area of origin. This becomes difficult to the development of a good team as the employees will accumulate functions and their performance will be impaired. Besides that, the rewards and promotion analysis become much more complicated if the work gets mixed up, and especially if the person's original tasks get more attention. Organizations genuinely interested in maintain strong intrapreneurship cannot overburden an intrapreneur and must recognize its contribution as innovative. [18]

Stakeholders are, by definition, all people interested in the results of innovation and intrapreneurship projects. This includes leaders, interns, advocates, sponsors and so on. Each one can bring a different vision and should be considered part of the project. Its advocates and sponsors, for example, not only support the activity but also have to be part of the planning and goals flexibility.

The formation of the team is extremely important for the intrapreneurship. However, it is essential to have in mind that a team is made up of people. Each one of them needs to be developed to be in their best version and bring positive results to the company. The characteristics desired for an intrapreneur should be clear to avoid future frustration, not only for the team but also personal.

In 1951, McClelland began his studies about behavior that were later improved and finalized in 1990 by Management Systems International (MSI). [55][56] A consistent and popular Entrepreneurial Behavioral Theory was developed. [57][58][59] His theory brought together ten of the main characteristics of the entrepreneurs (search of opportunities and initiative; persistence; commitment; quality and efficiency requirement; calculated risk taking; goals establishing; information search; systematic planning and monitoring; persuasion and networking; and independence and self-confidence). These characteristics refer to three main competencies related to entrepreneurs: achievement, planning and desire for power. In their study, Morris, Webb, Fu and Singhal also pointed out important characteristics of being encouraged and nourished in entrepreneurial profiles: Opportunities recognition; opportunity evaluation; risk management and mitigation; persuasion; perseverance; creativity; resources leverage; guerrilla ability; value creation; ability to maintain focus but adapt; resilience; self-efficacy; creation and usage of contact networks. [53] Although it is a very contemporary theme, the entrepreneur profile was already been specifically addressed in articles, different from the intrapreneur profile that has not yet been explored in detailed theories. Even without these more detailed theories on the subject, the studies about intrapreneurship often bring in their content important points of the intrapreneur profile.

Creative problem solving, or simply, the creativity, can be supported by the organization's practices and values. [21] The pursuit of corporate interests should be focused in innovation and creativity by the intrapreneurs. [24] The creativity not necessarily describes the ends only, but also the means. That is, it is not only about the final product or service, but also the process of ideation and development. [60] Rigid activities can negatively influence creative problem solving. [61]

Resilience allows those who work with innovation to cope with the risky environment and possible failures, as well as to adapt without losing their emotional stability. [62] Unlike entrepreneurs, intrapreneurs may have problems with conservative corporate structures, which also require resilience on the part of employees to overcome rigid controls and constraints. [24]

Perseverance or tenacity is described as "ability to sustain goal-directed action and energy when confronting difficulties and obstacles. [53]. The chances of failure in this universe are huge, therefore persevering despite the difficulties is an important feature. The intrapreneurs success depend on the creation of an environment where failures are allowed and tolerated. [8][24] What may not happen when large companies put the immediate profit as a priority and the low risk culture prevails. [63] For that reason, tenacity, constantly put to the test, is important for the intrapreneur.

Willingness to face risks is not only a feature of the corporate culture. The company must be open to risky actions, but the intrapreneur is also responsible for making this culture effective. They should feel free and comfortable to adopt such behavior, knowing that their innovative ideas will be supported even if risky. [64] Comparing the entrepreneur scenario, in large companies, the employee rarely realizes and feels the impact of the total risk and responsibility because the company itself absorbs a large part of them. It happens because the organization holds the concept and intellectual rights, as well as the financial results. [24]

Likewise, the ability to raise and manage resources is much more present in the entrepreneurs as they are constantly limited by resources. [65] Intrapreneurs can be sustained by access to the most present resources of a company. [61] There are several ways in which the intrapreneurs can guarantee greater access to resources and create synergy for the organization, such as creating research and development partnerships, teaching and learning partnerships (as universities), and joint ventures. [66]

Adaptation and flexibility while maintain focus is facilitated when there is a structure and culture that supports intrapreneurship. [67] The flexibility and the ability to be visionary in problem solving form are the main competences of an entrepreneur, in Williamson, Lounsbury & Han's opinion. [62] A rigid structure will require more reactionary and adaptive behavior of the intrapreneur. [24]

And finally, the ability to build and use people networks is one of the characteristics present in both

entrepreneurs and intrapreneurs. [21] The fact that any innovation project is multidisciplinary requires those involved to relate to the most diverse possible departments. The intrapreneurs' advantage is that they have already existing networks for many of the cases. Heterogeneity facilitates the exchange of information. [51]

## 2.10 Top management support

George & MacMillan point out that probably the most important topic of all is to have all activities fully supported and embraced by top management. [68] In fact, the first step of all intrapreneur process is to ensure the board's commitment to support all changes that will be made. Leadership support can be done with physical presence simply as well as with easy access to financial and human resources. [18]

The reason that this is such an important dimension is because intrapreneurship is a top-down process. It is a strategic activity for the company. [22] Therefore, senior leadership must encourage initiatives and efforts to innovate and develop new business.

## III. LITERATURE REVIEW CONSIDERATIONS

After the literary review, the listing of intrapreneurship dimensions was done and organized in table 1. The dimensions were divided into three main pillars: Management, Structure and Agents.

Table.1: Intrapreneurship dimensions and their pillars

Pillars	Dimensions
Management	Innovation and Renewal Ability
	Risk-taking and management
	Organizational culture and environment
	Proactivity
	Competitive aggressiveness
Structure	Structure and process for autonomy
	Resources
Agents	Multidisciplinary team and personal competences
	Top management support

Source: Author

The management pillar refers to all dimensions linked to organizational culture and company behavior, which are not tangible or formalized in processes, such as innovation ability, proactivity, among others. These dimensions are extremely important for intrapreneurship and are

represented by activities and actions that the company takes. However, if the organization wishes to improve in these aspects, a simple methodology will not solve fully the problem because it requires long term changes that demands behavioral efforts by the company.

The Structure is the pillar that categorizes all dimensions and actions that a company can provide procedurally to intrapreneurs, for example, a formalized innovation process, the reduction of bureaucracies and hierarchies, and the facilitation of the granting of resources. Structural characteristics of the company can greatly facilitate or hamper the results of intrapreneur projects. Mainly because intrapreneurship refers to innovation within the company, the barriers imposed by the organization are capable of sabotaging its own interests.

No innovation can be purely produced by a machine, for the power of creative transformation is linked with the thinking capacity of the human being. Therefore, agents are an important part of intrapreneurship. From top management support, to investing in each person's competencies, and wisely building an innovation team are dimensions related with the care needed with the people directly responsible for making intrapreneurship work or not within a company.

## IV. RESEARCH METHODOLOGY

In order to create a consistent intrapreneurship model, a broad review of the literature was made. At first, from a quick search with keywords, national and international articles were collected. After the first reading of these authors, it was possible to create an overview of the scenario. The bibliographic references of the articles that were closest to the desires approach were also researched. The dimensions that were more recurrent and significant were highlighted and, at the end, were analyzed. A model was then designed to represent the dimensions and the relation among them.

## V. DATA DESCRIPTION AND ANALYSIS

Innovation is not only based on the three main areas studied (Management, Structure and Agents), but it cannot exist with only two of them. Intrapreneurship, then, can be seen as an intersection of these pillars.

The final model (figure 1) represents the need for the three pillars raised, without the exclusion or classification of importance of any of them. The innovation in a company with a good management and structure but without capable agents is non-existent, since all intrapreneur actions are linked to specific skills and

abilities. The whole core of an innovative project lies in the creative capacity and integration of a team and the individuals that make it up. Likewise, without the presence of a structure conducive to innovation, despite competent agents and incentive management, projects will be limited by the lack of methodology in their processes, resources and by excessive bureaucracies. If the company is concerned with establishing a good procedural structure with capable people, but in its day-to-day it does not strengthen the innovation culture in its small acts and way of behaving in the market, intrapreneurship does not find spaces to develop.

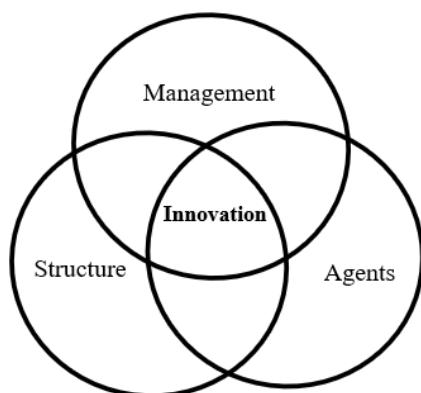


Fig. 1: Intrapreneurship intersection model

## VI. CONCLUSION

From the literature review, this article proposed to define, analyze and cluster the intrapreneurship dimensions in larger pillars (Management, Structure and Agents). Nine dimensions were studied: Innovation and renewal ability; risk-taking and management; Organizational culture and environment; proactivity; competitive aggressiveness; structure and processes for autonomy; resources; multidisciplinary team and personal competences; and top management support. With this, it was possible to draw a conceptual intersection model to make it clear that besides dependents, no pillar is more important. Innovation cannot exist outside the intersection of them. The agents will carry the intrapreneur actions with their creative abilities and integration, while the structure propitiates innovation with its processes, and the management creates a culture and environment that finds spaces for the development of intrapreneurship.

Bierwerth *et al.* [2] carried out a study with a meta-analysis approach, classifying and punctuating more than 40 articles that discuss companies' performance according to the presence of intrapreneurial aspects and taking into account also environmental and cultural factors. They could verify that innovation, corporate venturing and

strategic renewal have significantly impact to corporate overall performance but with limitations related subjectivity, number and heterogeneity of case studies. Most of the literature for corporate entrepreneurship is based in empirical findings. The main limitations are related to measure the impact of corporate entrepreneurship for having many subjective and not palpable outcomes in the short and medium term. Same difficulty reported in this article when we talk about analyzing intrapreneurship performance inside the companies. There are many articles with case studies involving companies but rarely with enough number to enable a solid and data-proved model. Therefore, next steps are related to the joint work of researchers and companies for cooperation with practical foundation.

## REFERENCES

- [1] Hill, M. E. (2003). The development of an instrument to measure intrapreneurship: entrepreneurship within the corporate setting (Doctoral dissertation, Rhodes University).
- [2] Bierwerth, M., Schwens, C., Isidor, R., & Kabst, R. (2015). Corporate entrepreneurship and performance: A meta-analysis. *Small business economics*, 45(2), 255-278.
- [3] Fumagalli, L. A. W., Del Corso, J. M., Silva, W. V., & da Costa, I. C. (2008). Intraempreendedorismo: um estudo das relações entre cultura organizacional e a capacidade de empreender nas empresas. Simpósio de Gestão da Inovação Tecnológica, ANPAD, Brasília, DF, Brasil, 25.
- [4] Zahra, S. A. (1991). Predictors and financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of business venturing*, 6(4), 259-285.
- [5] Heinonen, J., & Korvela, K. (2003, September). How about measuring intrapreneurship. In *Conference Proceedings of 33rd EISB (Entrepreneurship, Innovation and Small Business) Conference in Milan, Italy* (pp. 1-18).
- [6] Ghoshal, S., Piramal, G., & Bartlett, C. A. (2002). *Managing radical change: What Indian companies must do to become world-class*. Penguin Books India.
- [7] Kuratko, D. F. (2016). *Entrepreneurship: Theory, process, and practice*. Cengage Learning.
- [8] Mohanty, R. P. (2006). Intrapreneurial levers in cultivating value-innovative mental space in Indian corporations. *Vikalpa*, 31(1), 99-106.
- [9] Seshadri, D. V. R., & Tripathy, A. (2006). Innovation through intrapreneurship: The road less travelled. *Vikalpa*, 31(1), 17-30.
- [10] Beaver, G. (2001). Innovation, high technology and the new enterprise. *Strategic Change*, 10(8), 421.
- [11] Drucker, P. F. (1987). *Inovação e espírito empreendedor (entrepreneurship): prática e princípios*. São Paulo: Pioneira.
- [12] Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of

strategic momentum. *Strategic management journal*, 3(1), 1-25.

[13] Knight, G. A. (1997). Cross-cultural reliability and validity of a scale to measure firm entrepreneurial orientation. *Journal of business venturing*, 12(3), 213-225.

[14] Antoncic, B., & Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. *Journal of small business and enterprise development*.

[15] Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, 21(1), 135-172.

[16] Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship theory and practice*, 16(1), 7-26.

[17] Johnson, D. (2001). What is innovation and entrepreneurship? Lessons for larger organisations. *Industrial and commercial training*.

[18] Hisrich, R. D. (1990). Entrepreneurship/intrapreneurship. *American psychologist*, 45(2), 209.

[19] Muzyka, D. F., De Koning, A. J., & Churchill, N. C. (1995). Entrepreneurial transformation: a descriptive theory.

[20] Guth, W. D., & Ginsberg, A. (1990). Guest editors' introduction: Corporate entrepreneurship. *Strategic management journal*, 5-15.

[21] Menzel, H. C., Aaltio, I., & Ulijn, J. M. (2007). On the way to creativity: Engineers as intrapreneurs in organizations. *Technovation*, 27(12), 732-743.

[22] Bosma, N. S., Stam, E., & Wennekers, S. (2011). Intrapreneurship versus independent entrepreneurship: A cross-national analysis of individual entrepreneurial behavior. *Discussion Paper Series/Tjalling C. Koopmans Research Institute*, 11(4).

[23] Cantillon, R. (1734). *Essai sur la nature du commerce en général*. INEd.

[24] Baruah, B., & Ward, A. (2015). Metamorphosis of intrapreneurship as an effective organizational strategy. *International Entrepreneurship and Management Journal*, 11(4), 811-822.

[25] Kanter, R. M., & Richardson, L. (1991). Engines of progress: Designing and running entrepreneurial vehicles in established companies—the Enter-Prize Program at Ohio Bell, 1985–1990. *Journal of Business Venturing*, 6(3), 209-229.

[26] Sharma, P., & Chrisman, S. J. J. (2007). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. In *Entrepreneurship* (pp. 83-103). Springer, Berlin, Heidelberg.

[27] Stopford, J. M., & Baden-Fuller, C. W. (1994). Creating corporate entrepreneurship. *Strategic management journal*, 15(7), 521-536.

[28] Burgelman, R. A. (1983). Corporate entrepreneurship and strategic management: Insights from a process study. *Management science*, 29(12), 1349-1364.

[29] Elbaz, J., Binkour, M. & Majdouline I. (2013). Innovation and Entrepreneurship: An Empirical Study of Moroccan Firms, Conference Paper: <https://www.researchgate.net/publication/272353596>

[30] Rothwell, R., Freeman, C., Horsey, A., Jervis, V. T. P., Robertson, A. B., & Townsend, J. (1974). SAPPHO updated-project SAPPHO phase II. *Research policy*, 3(3), 258-291.

[31] Danneels, E. (2002). The Dynamics of Product Innovation and Firm Competences, *Strategic Management Journal*, 23, 1095-1121.

[32] Block, B. & Ornati, O.A. (1987). Compensating corporate venture managers, *Journal of Business Venturing*, 2, 41-51.

[33] Rank, J., Pace, V.L. & Frese, M. (2004). Three Avenues for Future Research on Creativity, Innovation, and Initiative, *Applied Psychology: An International Review*, 53, 4, 518-528

[34] Drejer, I. (2004). Identifying Innovation in Surveys of Services: A Schumpeterian Perspective, *Research Policy*, 33, 551-562.

[35] Miller, D. & Friesen, P.H. (1983). Strategy-making and environment, *Strategic Management Journal*, 3, 221-235.

[36] Miller, D. (1983). The correlates of Entrepreneurship in Three Types of Firms, *Management Science*, 29, 770-791.

[37] Lieberman, M. & Montgomery, D. (1988). First-mover advantages, *Strategic Management Journal*, 9, 41-58.

[38] Miller, A. & Camp, B. (1985). Exploring determinants of success in corporate ventures, *Journal of Business Venturing*, 1, 2, 87-105.

[39] Venkataraman, N. (1989). Strategic orientation of business enterprises: the construct, dimensionality, and measurement, *Management Science*, 35, 942-962.

[40] Covin, J.G. & Covin, T. J. (1990). Competitive aggressiveness, environmental context, and small firm performance, *Entrepreneurship Theory and Practice*, 14, 4, 35-50.

[41] Porter, M. E. (1985). Competitive advantage: Creating and sustaining superior performance. *Competitive advantage*, 167, 167-206.

[42] Pinchot, G.III (1985). Intrapreneuring: You Don't Have to Leave the Corporation to Become an Entrepreneur. New York: Harper and Row.

[43] Kanter, R.M. (1983). The change masters: Innovation and entrepreneurship in the American corporation. New York: Simon & Schuster.

[44] van Everdingen, Y.M. & Waarts, E. (2003). The effect of national culture on the adoption of innovations, *Marketing Letters*, 14, 3, 217-232.

[45] Rejeb, H.B., Guimarães, L.M., Boly, V. & Assié lou, N.G. (2008). Measuring Innovation Best Practices: Improvement of an Innovation Index Integrating Threshold and Synergy Effects, *Technovation*, 28, 838-854.

[46] Cooper, J.R. (1998). A Multidimensional Approach to the Adoption of Innovation, *Management Decision*, 36, 493-502.

[47] Ireland, R.D., Hitt, M.A. e Sirmon, D. G. (2003). A Model of Strategic Entrepreneurship: The Construct and its Dimensions, *Journal of Management*, 29, 963-989.

[48] Carvalho, R. L. (2016). Inovação intraorganizacional: influência do intraempreendedorismo no fomento à disruptão digital de mercados. Tese de mestrado, Centro de Informática UFPE, Universidade Federal de Pernambuco, Recife.

[49] Peterson, R.A. & Berger, D.G. (1971). Entrepreneurship in Organizations: Evidence from the Popular Music Industry, *Administrative Science Quarterly*, 15, 97-107.

[50] Toner, P. (2011). Workforce Skills and Innovation: An Overview of Major Themes in the Literature, *OECD Education Working Papers*, 55.

[51] Stinchcombe, A.L. (1965). Social Structure and Organizations, *Handbook of Organizations*, 142-193.

[52] Schott, T. e Sedaghat, M. (2014). Innovation Embedded in Entrepreneurs' Networks and National Educational Systems, *Small Business Economics*, 43, 463-476.

[53] Morris, M.H., Webb, J.W., Fu, J. & Singhal, S. (2013). A Competency-Based Perspective on Entrepreneurship Education: Conceptual and Empirical Insights, *Journal of Small Business Management*, 51, 352-369.

[54] Marcati, A., Guido, G. & Peluso, A.M. (2008). The Role of SME Entrepreneurs' Innovativeness and Personality in the Adoption of Innovation, *Research Policy*, 37, 1579-1590.

[55] McClelland, D.C. (1951). Personality. New York: William Sloane Associates.

[56] Management Systems International (MSI). Entrepreneurship training and the strengthening of entrepreneurial performance. Submetido por Robert Young, Washington, 1990.

[57] Venturi, J.L. (2003). Estudo das características empreendedoras dos proprietários de restaurantes na cidade de Itapema, conforme a abordagem de David McClelland. Dissertação de Mestrado. Centro de Educação Superior de Balneário Camboriú, Balneário Camboriú.

[58] Allemand, R. N. (2007). Apostila Sobre Teoria Comportamental Empreendedora. Recuperado em 14 de setembro, 2017, do Centro Federal de Educação Tecnológica de Pelotas: <https://goo.gl/TQjpVk>.

[59] Santiago, E.G. (2009). Vertentes teóricas sobre empreendedorismo, *Revista de Ciências Sociais*, 40, 2, 87-103.

[60] McAdam, R. & McClelland, J. (2002). Individual and Team-Based Idea Generation Within Innovation Management: Organizational and Research Agendas, *European Journal of Innovation Management*, 5, 86-97.

[61] Kacperczyk, A. J. (2012). Opportunity Structures in Established Firms: Entrepreneurship Versus Intrapreneurship in Mutual Funds, *Administrative Science Quarterly*, 57, 484-521.

[62] Williamson, J.M., Lounsbury J.W. & Han, L.D. (2013). Key Personality Traits of Engineers for Innovation and Technology Development, *Journal of Engineering and Technology Management*, 30, 157-168.

[63] Douglas, E.J. & Fitzsimmons, J.R. (2013). Intrapreneurial Intentions Versus Entrepreneurial Intentions: Distinct Constructs with Different Antecedents, *Small Business Economics*, 41, 115-132.

[64] Alpkan, L., Bulut, C., Gunday, G., Ulusoy, G. & Kilic, K. (2010). Organizational support for intrapreneurship and its interaction with human capital to enhance innovative performance, *Management decisions*, 48, 732-755.

[65] Morris, M. Schindehutte, M. Walton, J. & Allen, J. (2002). The ethical context of entrepreneurship: Proposing and testing a developmental framework, *Journal of Business Ethics*, 40, 331-361.

[66] Teng, B. (2007). Corporate Entrepreneurship Activities through Strategic Alliances: A Resource Based Approach toward Competitive Advantage, *Journal of Management Studies*, 44, 119-142.

[67] Morris, M.H. & Kuratko, D.F. (2002). Corporate entrepreneurship: Entrepreneurial development within organizations, Orlando: Harcourt College Publishers.

[68] George, R. & MacMillan, I.C. (1985). New venture planning: Venture management challenges, *Journal of Business Strategy*, 6, 85-91.